

## CLAIMS

What is claimed is:

- 1 1. A method comprising:  
2 compiling data on reported factors that cause data transmission errors;  
3 predicting unreported factors that can cause data transmission errors;  
4 compiling data on the unreported factors;  
5 employing error correction on data to be transmitted, based on at least  
6 one of the data on the reported factors and the unreported factors; and  
7 transmitting the data to be transmitted to at least one receiver.
- 1 2. The method as in claim 1, wherein the compiling data on the reported  
2 factors and on the unreported factors comprises collecting data that can effect  
3 data transmission on a path to the at least one receiver, and collecting data on  
4 at least one of regional data, environmental data, atmospheric data, sunspot  
5 activity and season, radio frequency propagation data, and retransmission  
6 factors.
- 1 3. The method as in claim 1, wherein the compiling data on reported  
2 factors comprises at least one of continuously collecting data and collecting  
3 data at predetermined events that can effect data transmission.
- 1 4. The method as in claim 1, wherein the predicting unreported factors  
2 comprises at least one of continuously predicting and predicting at  
3 predetermined events that can effect data transmission.
- 1 5. The method as in claim 1, wherein the employing error correction  
2 comprises employing at least one of forward error correction and carouselling,  
3 and adjusting at least one of bandwidth and Quality Of Service (QOS).
- 1 6. The method as in claim 1, wherein the employing error correction  
2 comprises dynamically adjusting error correction.
- 1 7. The method as in claim 1, wherein the transmitting comprises  
2 broadcasting data.

1 8. The method of claim 1, wherein the transmitting the data comprises  
2 utilizing at least one of wireless conventional ground terrestrial transmission,  
3 digital television (DTV) connection, analog and digital cable television (CATV),  
4 satellite connection, direct broadcast satellite system (DBS), wide area network  
5 (WAN) connection, and formats chosen by the Advanced Television Systems  
6 Committee (ATSC) and the National Television Standards Committee (NTSC).

1 9. An apparatus comprising:  
2 an error correction engine to compile data on reported factors that cause  
3 data transmission errors, predict and compile unreported factors that can cause  
4 data transmission errors, and employ error correction on data to be transmitted,  
5 based on at least one of the data on the reported factors and the unreported  
6 factors; and  
7 a transmitter, coupled to the error correction engine, to transmit the data  
8 to be transmitted to at least one receiver.

1 10. The apparatus as in claim 9, wherein the error correction engine collects  
2 data that can effect data transmission on a path to the at least one receiver,  
3 and collects data on at least one of regional data, environmental data,  
4 atmospheric data, sunspot activity and season, radio frequency propagation  
5 data, and retransmission factors.

1 11. The apparatus as in claim 9, wherein the error correction engine at least  
2 one of continuously collects data on reported factors and collects data on  
3 reported factors at predetermined events that can effect data transmission.

1 12. The apparatus as in claim 9, wherein the error correction engine at least  
2 one of continuously predicts unreported factors and predicts unreported factors  
3 at predetermined events that can effect data transmission.

1 13. The apparatus as in claim 9, wherein the transmitter broadcasts data.

1 14. The apparatus as in claim 9, wherein the error correction engine  
2 dynamically employs at least one of forward error correction and carouselling,  
3 and adjusts at least one of bandwidth and Quality Of Service (QOS).

1 15. The apparatus of claim 9, wherein the transmitter utilizes at least one of  
2 wireless conventional ground terrestrial transmission, digital television (DTV)  
3 connection, analog and digital cable television (CATV), satellite connection,  
4 direct broadcast satellite system (DBS), wide area network (WAN) connection,  
5 and formats chosen by the Advanced Television Systems Committee (ATSC)  
6 and the National Television Standards Committee (NTSC).

1 16. A machine readable medium having instructions that when executed by  
2 a processor cause the processor to perform operations comprising:  
3 compiling data on reported factors that cause data transmission errors;  
4 predicting unreported factors that can cause data transmission errors;  
5 compiling data on the unreported factors;  
6 employing error correction on data to be transmitted, based on at least  
7 one of the data on the reported factors and the unreported factors; and  
8 transmitting the data to be transmitted to at least one receiver.

1 17. The machine readable medium of claim 16, wherein the compiling data  
2 on the reported factors and on the unreported factors comprises collecting data  
3 that can effect data transmission on a path to the at least one receiver, and  
4 collecting data on at least one of regional data, environmental data,  
5 atmospheric data, sunspot activity and season, radio frequency propagation  
6 data, and retransmission factors.

1 18. The machine readable medium of claim 16, wherein the compiling data  
2 on reported factors comprises at least one of continuously collecting data and  
3 collecting data at predetermined events that can effect data transmission.

1 19. The machine readable medium of claim 16, wherein the predicting  
2 unreported factors comprises at least one of continuously predicting and  
3 predicting at predetermined events that can effect data transmission.

1 20. The machine readable medium of claim 16, wherein the employing error  
2 correction comprises employing at least one of forward error correction and

3 carouselling, and adjusting at least one of bandwidth and Quality Of Service  
4 (QOS).

1 21. The machine readable medium of claim 16, wherein the employing error  
2 correction comprises dynamically adjusting error correction.

1 22. The machine readable medium of claim 16, wherein the transmitting  
2 comprises broadcasting data.

1 23. The machine readable medium of claim 16, wherein the transmitting the  
2 data comprises utilizing at least one of wireless conventional ground terrestrial  
3 transmission, digital television (DTV) connection, analog and digital cable  
4 television (CATV), satellite connection, direct broadcast satellite system (DBS),  
5 wide area network (WAN) connection, and formats chosen by the Advanced  
6 Television Systems Committee (ATSC) and the National Television Standards  
7 Committee (NTSC).